Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference JFKR-55-PCT International splication No. PCT/JP2003/004232 International filing date (day/month/year) PCT/JP2003/004232 International Patent Classification (IPC) or national classification and IPC HOIR 43/02, 4/02, HOIB 7/00, B23K 11/00 Applicant FUJIKURA LTD. 1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of		(2 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
International applications (IPC) or national classification and IPC HOIR 43/02, 4/02, HOIB 7/00, B23K 11/00 Applicant FUJIKURA LTD. 1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 5 _ sheets, including this cover sheet. This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of sheets. 3. This report contains indications relating to the following items: I Basis of the report II Priority III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV Lack of unity of invention V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement VI Certain documents cited VII Certain defects in the international application VIII Certain observations on the international application Date of submission of the demand 30 September 2003 (30.09.2003) Date of completion of this report O1 April 2004 (01.04.2004) Name and mailing address of the IPEA/IP Authorized officer			ON Preliminary	Examination Report (Form PC1/IPEA/416)
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International application No.

PCT/JP2003/004232

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP03/04232

V. Lack of unity of invention
1. In response to the invitation to restrict or pay additional fees the applicant has:
restricted the claims.
paid additional fees.
paid additional fees under protest.
neither restricted nor paid additional fees.
2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
complied with.
not complied with for the following reasons:
Claims 1-12 relate to a cable connection method, cables and a cable welder, wherein welding extending in the longitudinal direction of the conductor is carried out by means of a pair of electrodes separated from each other in the longitudinal direction. Claims 13-17 relate to a cable comprising a plurality of core wire conductors that are respectively connected to a plurality of contacts. These two groups of inventions are not found to be one invention group so related as to form a single general inventive concept.
·
 Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
all parts.
the parts relating to claims Nos.

International application No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

PCT/JP03/04232

V. Reasoned statement under Artic citations and explanations suppo	le 35(2) with regard orting such stateme	d to novelty, inventive step or industrial applicability; ent	
1. Statement			YES
Novelty (N)	Claims	1-17	
	Claims		NО
			YES
Inventive step (IS)	Claims		 NO
	Claims	1-17	NO
T 1 toi-1 liophility (IA)	Claims	1-17	YES 7
Industrial applicability (IA)			NO ·
	Claims		

2. Citations and explanations

Document 1: JP, 10-80777, A (Siemens AG.), March 31, 1998 (03.31.98)

Document 2: JP, 2-132783, A (Toshiba Corporation), May 22, 1990 (05.22.90)

Document 3: JP, 60-50079, B2 (Tanaka Kikinzoku Kogyo K.K., Tanaka Chemical K.K.), November

6, 1985 (11.06.85)

Document 4: JP, 9-161936, A (Yazaki Corporation), June 20, 1997 (06.20.97)

Document 5: JP, 7-153519, A (The Witaka Corporation), June 16, 1995 (06.16.95)

Document 6: JP, 11-354215, A (Matsushita Electric Works, Ltd.), December 24, 1999 (12.24.99)

The inventions of claims 1, 2, 4, 5, 7 and 9 do not appear to involve an inventive step over documents 1 and 2 cited in the ISR. Document 1 describes art for welding tabular metal conductors (15, 17 and 21) by means of a pair of electrodes (7 and 9) separated from each other in the longitudinal direction of the conductors. Document 2 describes art for press welding tabular electrodes (4a' and 4b') while applying a load. When welding in this way, considering formation of region (5), a discolored part being formed as appropriate would be obvious to a person skilled in the art.

The inventions of claims 3, 6, 8 and 10 do not appear to involve an inventive step over document 1 and document 3 cited in the ISR. Document 3 (3rd column, lines 9-12), suggests that Au works as a brazing filler metal to form an alloy layer.

The inventions of claims 11 and 12 do not involve an inventive step over document 1 and document 4 cited in the ISR. The second embodiment described in document 4 relates to a welding device that causes a pair of electrodes (8 and 9) to move and come in contact with a connector.

The inventions of claims 13-17 do not appear to involve an inventive step over documents 5 and 6 cited in the ISR. Document 5 (paragraph [0024]) and document 6 (paragraph [0030]) describe the point that a core wire conductor of a cable and a connector are welded and connected to each other. INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP03/04232

Certain documents cited			
Certain published documents (R Application No. Patent No.	Rule 70.10) Publication date (day/month/year,	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
JP 2003-109708 A	11.04.03	28.09.01	
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Non-written disclosures (Rul	e 70.9)		Date of written disclosure
Kind of non-written		Date of non-written disclosure (day/month/year)	referring to non-written disclosure (day/month/year)